

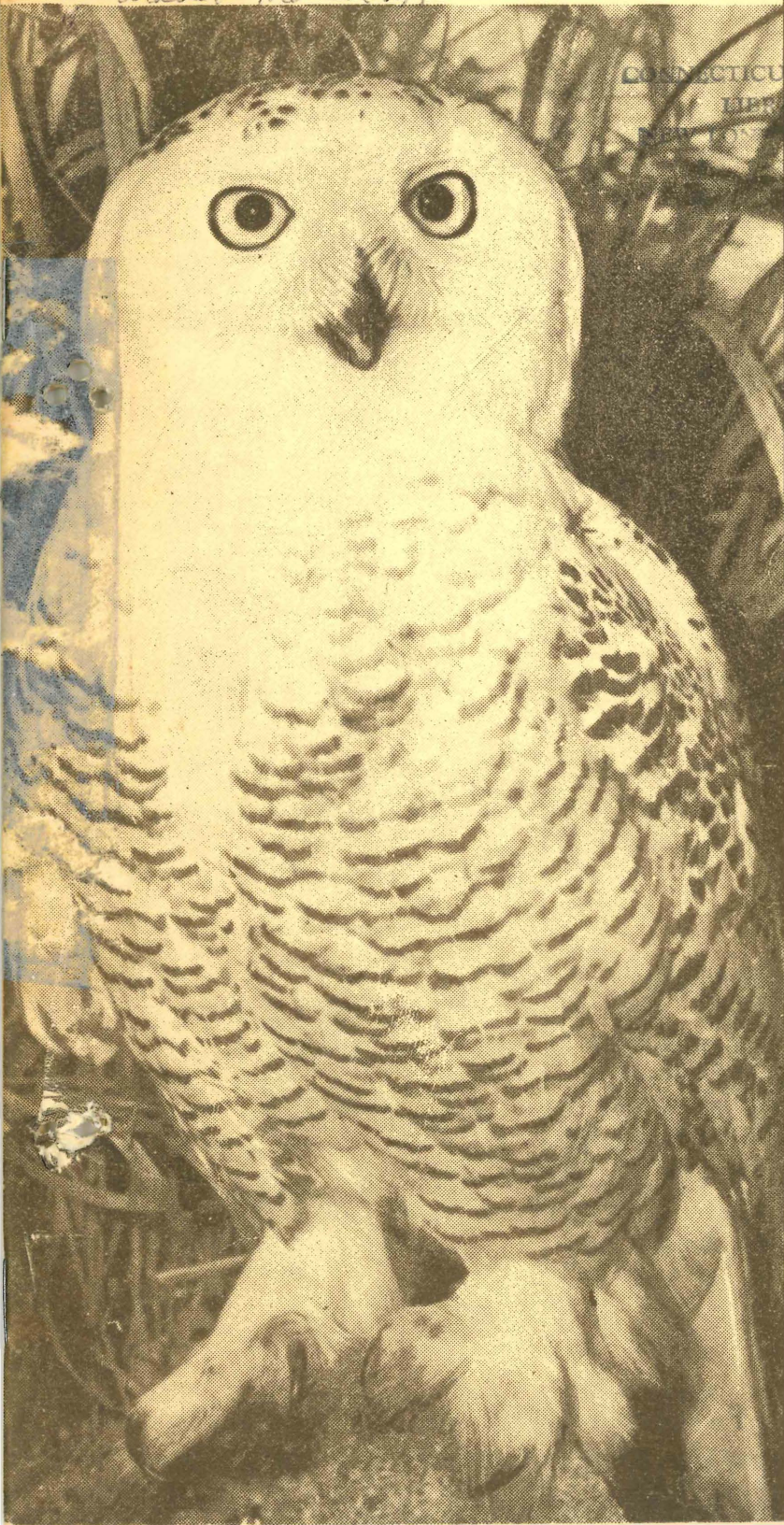
Naturalist notebook,

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NATURALIST NOTEBOOK

JANUARY 1968

VOLUME III No. 1

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COVER: SNOWY OWL

NATIONAL AUDUBON SOCIETY
PHOTO

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Published by the

THAMES SCIENCE CENTER

622 Williams Street

New London, Connecticut 06320

JOHN F. GARDNER — *Executive Director*

ROBERT C. DEWIRE — *Naturalist*

The NATURALIST NOTEBOOK is published monthly. Subscription available through membership only.

The Thames Science Center is a non-profit organization seeking a quality environment through education.

The active support of children and adults in the Science Center, its programs, activities and efforts is earnestly solicited.

JOHN F. GARDNER
Editor

The Interpretive Museum of 622 Williams Street, New London, Connecticut 06320
The Peace Sanctuary Nature Preserve At 200 River Road, Mystic, Connecticut 06355



JANUARY'S NATURE CALENDAR

JANUARY is the month of quiet. Animals are least active during this month. Chipmunks, woodchucks and skunks are all sleeping in their winter burrows. Even gray squirrels which stay active most of the winter, will crawl into a hole in a tree during severe winter weather and feed on the nuts and acorns that they had stored during the fall.

Frogs, toads, salamanders and turtles are all buried deep in the mud under ponds and streams. Snakes are hibernating underground also. Most fish become very inactive during this period, settling to the bottom of the pond or stream and hardly moving at all.

The insects have all gone underground, under the bark of trees, or into dead logs for the winter. Many of them winter over in a stage of life called the pupal stage. During this time they are covered with a hard material that protects them from the weather.

Even birds cut down their activity. Waterbirds usually gather in large flocks and stay in one area, moving very little. A large number of our landbirds have flown South for the winter leaving behind only the hardy seed-eaters. The feeding station is about the only place where one can find much activity during January as numbers of birds fly to and from the feeders. If you don't already have one, you should set up a station in your yard. The activity that will result will greatly brighten an otherwise quite dull month.

(Continued next page)

JANUARY'S NATURE CALENDAR

Jan. 1... The coldest month of the year begins as winter tightens its grip on all...

Jan. 4... Earth is closest to the Sun today... 91,265,000 miles. Yet what will today's temperature be?

Jan. 6... Adult Field Trip to Cape Ann, Mass.

Jan. 7... Family Film Festival featuring "Trek to the Teatons" plus "Winter Sleep".

Jan. 8... Mars is our evening star, setting at 8:02 P.M.

Jan. 12... This day has 9 hrs. and 21 minutes long... by this date in February it is 10 hrs. 27 minutes long... Spring is coming... soon?

Jan. 13... Family Nature Jaunt to Harkness 8:30 A.M. Aquarium Workshop in the afternoon.

For a complete listing of the Thames Science Center's programs and activities write for Calendar of Events Bulletin....

Jan. 14... Off to the Peace Sanctuary Nature Preserve in Mystic for a Family Nature Jaunt.

Jan. 15... The Full Moon tonight--called the Wolf Moon. Who can tell us why?

Jan. 17... No better time to star-gaze than January. Look for three-star belted Orion in the Southeast. The Dog Star Sirius is the brightest of all....

Jan. 20... Crystal Garden Workshop at the Science Center.

Jan. 24... Raccoons rouse about and begin mating. Look for sunny days... Skunk Cabbage in bloom ...maybe?

Jan. 27... Botany for Juniors Workshop. Topic is Plants from Cuttings.

Jan. 28... Audubon Wildlife Film Lecture: John D. Bulger's "Wild Rivers of North America". Series ticket holders and their guests only... sorry!

The Children's Corner

by TRUDY GARDNER

Every four years or so the lemming, a little rodent four or five inches long, with a short tail and furry feet, who lives in the Arctic becomes scarce. When this happens a great large owl with a thick coat of white feathers that cover even his legs and feet, comes down from the Arctic Tundra of Northern Canada looking for food.

Is this the year when the lemmings are scarce and the Snowy Owls come to Connecticut? It may be so because last month we saw a Snowy Owl perched on a T. V. antenna right in the middle of New London. You might have seen his picture in the newspaper--staring down at the photographer.

A Snowy Owl would be easy for you to recognize. He is one of our largest owls, more than two feet long and when he flies his wings stretch out almost five feet.

The Snowy Owl is all white except for some reddish or grayish-brown flecks on his feathers. He reminds us of a little white snowman when he is sitting in a field.

Remember the Snowy Owl doesn't come to Connecticut because he is cold...but because his food is scarce. He comes looking for mice and other rodents. The Snowy Owl is man's friend and should be protected.

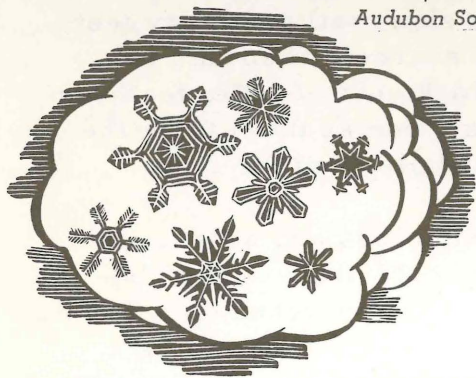
If you see a Snowy Owl in your neighborhood be sure to call the Science Center and tell us about it.



The Snowflake Family

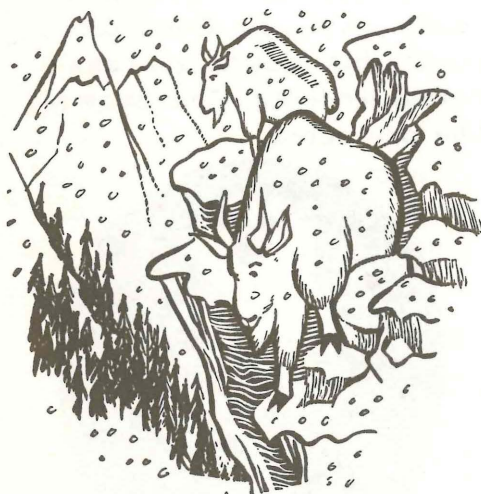
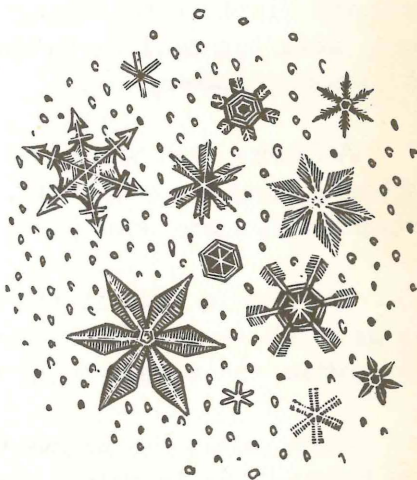
BY-DOROTHY JANE GOULDING
ILLUSTRATED BY-RICHARD D. BROWN,

Audubon Society of Canada.

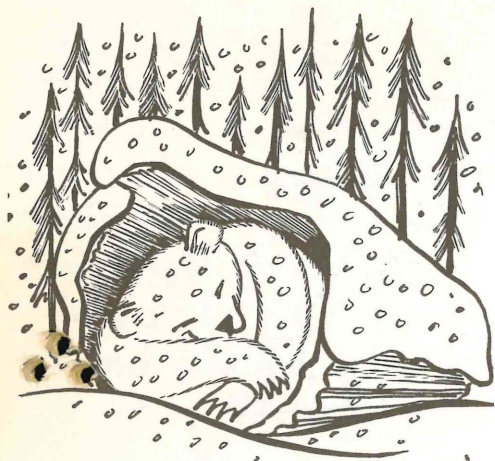


Once upon a time, high in the air, there lived a family of snowflakes, some big, some little, in a cloud which floated about in the sky.

One day, the snowflakes began to fall out of their home in the cloud. Down, down, down to earth they came, in a thick and heavy snowstorm.

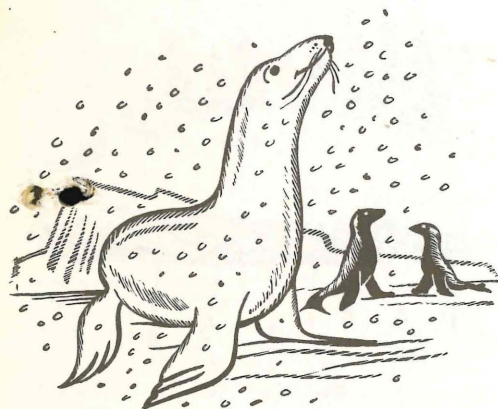


Some snowflakes fell on the mountain tops. The mountain sheep saw them coming, and hurried to shelter in rocky caves. They hoped the snowstorm wouldn't make it too hard for them to find food.



In the woods, a bear was fast asleep in her hole under a log. Some of the snowflakes fell on top of the log, but the bear didn't mind. The snow made her den warm and cosy.

The rabbit, who had turned his brown coat white for the winter, knew his enemies couldn't see him so well when he was against the snow. Mrs. Grouse made herself a nest in a snow-drift to sleep in.



Up north, where the snow flakes fell, the seals were glad too. They could pull themselves over the snow and ice better than over the bare earth and rocks.

The Eskimo looked up at the snowflakes and thought, "Now is the time for me to build myself a new snow house."



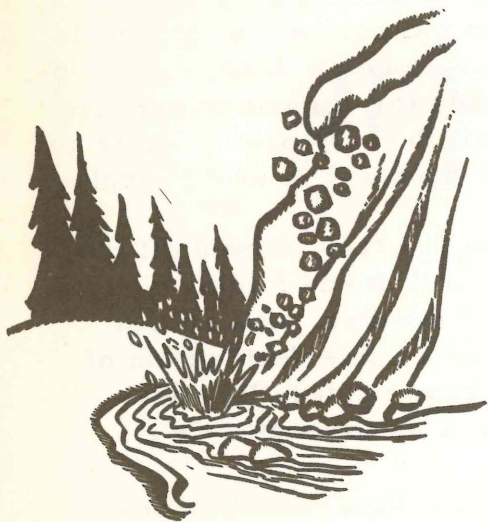
Under the ground, the roots of the plants were glad the snowflakes had come. "This warm snow blanket will keep us from freezing and melting too many times before spring comes," they whispered.



But the evergreen trees sighed a little, and thought how heavy the snow lay on their branches. "We hope it won't break us, or bend us too far out of shape," they said.



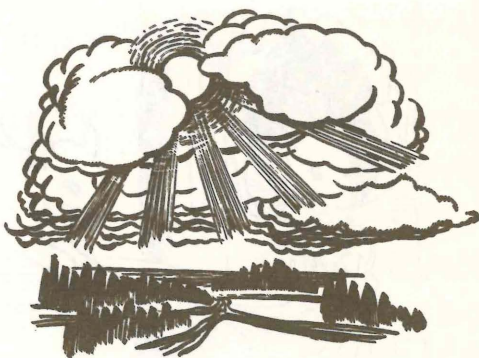
Spring came at last, bringing warm sunshine. "We're turning to water," cried the snowflakes. Sure enough, they began to melt. Some of the water sank into the ground making it soft for the young plants to grow.



When all the snowflakes had turned to water, one after another they began to float up on the arms of the sun—up, up, to the sky again. Maybe they live in the cloud that's floating above your house.



Some of the snowflakes had frozen hard in the cracks of the rocks. When they melted, they pushed the rocks apart. Down fell big chunks into the river, with a splash, making new paths for the water to follow.



WHERE'S MY DEN by EDWIN A. MASON

Animals that house themselves in tree cavities are in dire straits. Our way of life tends to eliminate all potential wild animal dens. Mammals decide to do it themselves--they chew a hole through a roof and den-up in your domicile.

So let's not be so modern and neat that not a dead branch or dead tree, or even a live tree with cavities in it, remains in the landscape. Chickadees snuggle together on cold winter nights in regular bird boxes. Squirrels den together to keep warm in wood duck nests boxes. Raccoons den-up either alone or in family groups. Rabbits and skunks thank heaven for surplus woodchuck holes. The furry creatures all look for protection from winter winds somewhere. But dens are in short supply.

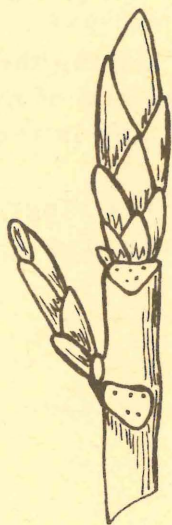
Man has chopped down the den tree, sawed off the dead branch that had a cavity in it; made finding a winter home much more difficult for many. Man should erect nest boxes to compensate for this destruction of essential homes. If we would have wildlife live near where we live, a place to live is as important as a food supply.

(from: Mass. Audubon Newsletter)



JUNIOR NATURALIST NOTEBOOK

BOTANY
FOR
JUNIORS



Examining Winter Twigs
An Activity

Copyright 1967
By
JOHN F. GARDNER

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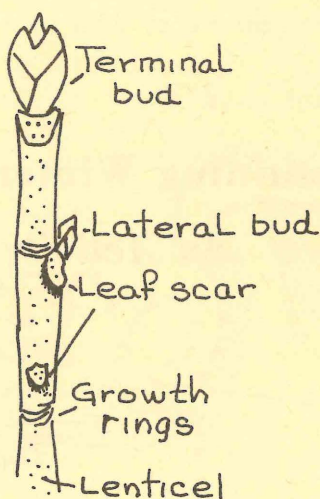
INVESTIGATING A TWIG

In the winter when the leaves have fallen from the trees it is a good time to explore how a tree grows, especially its twigs and their part in the growth of the tree.

A young tree is called a sapling. A sapling grows higher and spreads its branches by lengthening the tips of its twigs. Eventually the twigs grow into branches.

During the summer growing season a bud is formed at the end of most twigs. This bud is called a terminal bud, and is the source of the next year's growth.

The diagram below shows a typical twig. Note all of the various things that are found on a twig....



When a leaf falls from the twig, it leaves a scar. Above the scar new buds form. These buds grow into new leaves or flowers. The leaf buds along the side of the twig have a special name: Lateral buds.

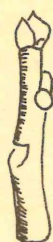
When you examine your twig look at the buds very carefully, possibly with a magnifier. Note the waxy covering on the bud or often you will find overlapping scales. These can be brown, red or green and are designed to protect the bud from winter cold and wind.

Look again at the leaf scars. These are the places where last year's leaves were attached to the twig. Look for the tiny scars from the bundles, where the food and water passed to the leaf.

Lenticles are the tiny holes where air is passed in and out of the twig.

Be sure to look for the growth rings or terminal bud scars. These are caused when the protective scales break away from the terminal bud in the spring. By counting them you can determine the age of your twig....

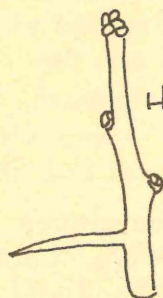
On the back page of this pamphlet you will find some diagrams of several twigs that are common to this area. Why not begin your own collection of sketches of the twigs in your neighborhood and then next summer compare them to the twig with all its leaves?



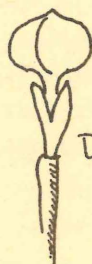
Sassafras
(Green twigs)



Beech
Long narrow
buds



Hawthorn



flower
bud

Dogwood



Red
Maple
(red bud)

SOME BOOKS TO READ

Fruit Key and Twig Key to Trees and Shrubs by William
M. Harlow, N. Y. Dover, 1959

Common Trees and their Twigs, Audubon Nature Bulletin,
Audubon Society, N. Y.

The Study of Trees made Simple by Rutherford Platt,
N. Y. Washington Square



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THAMES SCIENCE CENTER**

622 Williams Street
New London, Connecticut 06320

PET CORNER *by DAVE RICHARDS*

THE JAPANESE WEATHER LOACH

Now that we are into mid-winter, people like to know when snowy weather is coming. One way of knowing ahead of time what to expect from the weather is to have your own live barometer--the Japanese Weather Loach.

This tropical fish would be an interesting and inexpensive addition to your aquarium. They usually grow to about eight inches in length, but can be purchased when they are only two to four inches long. Their general color is a light gray or brown with darker blotches on their sides. They swim in an eel-like manner and are fairly good scavengers.

A drop in the barometer will send this fish scurrying all over the tank. When the weather is nicer and at a steady temperature, the fish stays pretty much hidden.

It might be fun to see who can predict the weather more accurately this winter--the weatherman or your weather loach!

MEMO:

In an effort to reduce costs and improve the quality of our publications we have combined the Junior Naturalist Newsletter and The T. S. C. Conservationist into this new monthly publication titled the Naturalist Notebook we welcome your comments and suggestions.



ARTICLES OF ADULT INTEREST

We welcome notice of Conservation activities or problems for inclusion in this section of the Naturalist's Notebook. . . . Please let us know of your local activity so that others may be aware of your efforts and lend their support where possible. . . .

LANTERN HILL. . . To date a committee has been appointed to look further into the matter. However no further meetings have been held since the one reported in our November Issue. Hikes are being planned to interest others in Lantern Hill. Mr. Dewire, Naturalist at the Science Center is a member of the Advisory Committee and will have more to report as things develop.

WETLANDS: Write for the free booklet "Connecticut's Heritage of Beauty and Value" from Save The Wetlands Committee of the Natural Area Council, 103 Bingham Laboratory, Yale University, New Haven, 06520. It answers many questions concerning the wetlands.

LITTER: The Citizens Committee to Keep Connecticut Clean and Beautiful is in the process of surveying various towns and parks in Connecticut. . . . One big gap that has been noted is that even if you wanted to put litter in the container. . . many towns don't have any litter baskets. Check your town and let's be sure there is a place to throw the litter besides the street. . . .

OCEANOGRAPHY C101...is the name of a special correspondence course being offered by the University of Washington, Division of Correspondence Study, Seattle, Washington 98105. The course requires a basic knowledge of algebra and physics. This is a basic survey course rather than concentrating on a specific facet.

PARKLANDS: New London is short 100 acres of park-land, so the report goes...let's be very careful of land use, and be sure we save what we have.

SALMON RIVER: It comes to our attention that a dam is to be built on the Salmon River. This stream while not the finest trout water in the state is large enough to offer satisfactory fly fishing, thus a large section of the stream is designated for fly fishing only. The Leesville Dam has been designed to include a fish ladder with the idea to introduce sea-run brown trout. The new dam does not include a fish ladder. The question is why and without it what are the consequences....For some thoughts on this write to: Andrew F. Turano, M. D., 17 Taylor Drive, Portland, Connecticut 06480. Telephone 342-1735.

HUNTS BROOK: And the Fly Ash goes on and on and on
..... ?

**WE HAVE A NEW SUPPLY OF BIRD FEEDER AND SEED FOR
YOUR WINTER FEEDING PROGRAM.**

FIELD NOTES

BOB DEWIRE

November 15 - December 15

Saybrook - Lyme: On Dec. 9th there were 72 RUDDY DUCKS, 85 COOT and 50 MUTE SWANS in South Cove, Saybrook. An AMERICAN BITTERN was seen flying over Great Island on November 25th.

Waterford - New London: A large flock of RED-WINGED BLACKBIRDS were present in a field in Oakdale on November 20th and the BARRED OWL has once again returned to his winter roost in a lone white pine at Kitimaug. A single EVENING GROSBEAK was at a feeder at Mary Butler Drive in Waterford on December 10th. 5 CARDINALS are coming to the feeders at the Science Center. A female COMMON MERGANSER and VIRGINIA RAIL were at Harkness Park and Waterford Beach respectively on December 10th. A RED-NECKED GREBE was in the Thames River on November 26th. On December 12th a SNOWY OWL was seen on a TV antenna at a house on Smith Street, New London.

Groton - Mystic - Ledyard: LOGGERHEAD SHRIKES were reported from Trumbull Airport and Groton Long Point. Also at Groton Long Point there were 14 GREAT BLUE HERONS on November 16th and 10 BLACK CROWNED NIGHT HERONS on December 10th. In Ledyard a gray-phase SCREECH OWL is roosting in a hole in a tree at the corner of Indian Town Road. A flock of 18 KILLDEER were at Highland Lake on December 10th. A YELLOW-BELLIED SAPSUCKER was at the Peace Sanctuary on November 20th and a DICKCISSEL was at a feeder in West Mystic on the 19th. A very large flock of ROBINS were in a field along River Road in Mystic for several weeks. A WOODCOCK was on Latimer Point November 17th. A RED-BELLIED WOODPECKER has

been coming to the Pequot--sepos Sanctuary feeder since December 1st.

Stonington - Rhode Island Shoreline: Over a dozen EVENING GROSBEAKS and two SAPSUCKERS were at a feeder in North Stonington on November 27th. In Rhode Island a SHORT-EARED OWL was seen flying over the marshes at Galilee on November 19th. On December 9th an ICELAND GULL was at Weekapaug and a DOVEKIE was just offshore at the Point Judith Lighthouse.

Contributors to this column were: Mr. and Mrs. Kenneth Bates, Grace Bissell, Lawrence Brooks, Robert Dewire, Mr. and Mrs. Frank Eastman, Warren Fish, Capt. John Kinsey, Mary Laffargue, Margaret MacGregor, Walter Moran and Mr. and Mrs. Russell Waldo.

EDITOR'S NOTE: We welcome the first sighting of various birds, animals and plants occurring in Southeastern Connecticut. If you have an unusual or interesting item you feel would be of use please call the Center. Only with many people reporting can we keep accurate records of the various nature happenings. Remember we seek all types of items: Birds, animals, plants, etc.

February's Field Notes will include the results from the Annual Christmas Count.

DISCOVERING NATURE WITH YOUR CHILD

by J. F. GARDNER

The time is fast approaching when your child will present you with the thought that he or she needs a Science Fair Project to take into school. The Connecticut Science Fair that is held in Hartford each year and includes exhibits from all over the State is scheduled for March 27 thru 30th.

Here are some things to remember when the Science Fair project hits....

- a. most fairs have size requirements. The most common is that the exhibit must be confined to a space not exceeding 30 inches front to back and 48 inches side to side. No wall space provided.
- b. In planning an exhibit choose a scientific principle or idea to present... some research of an individual basis is always good.

Most fairs are judged on the following items:

1. Scientific thought..... 30 points
2. Creative Ability..... 30 points
3. Thoroughness..... 10 points
4. Skill..... 10 points
5. Clarity..... 10 points
6. Dramatic Value..... 10 points

The single most important thing we as parents can remember about a Science Fair project is that we are advisors...not doers. Let them take in their project not our mechanical or scientific ability.

YOUR OWN FAMILY NATURE JAUNT *by BOB DEWIRE*

Mystic River - Peace Sanctuary

A pleasant morning or afternoon can be spent looking at wildlife along the Mystic River and at the Peace Sanctuary. By looking both at a water and a woodland area during January, a good variety of birdlife can be seen in a short period of time.

The west side of the Mystic River offers the best vantage points along River Road. Unless there has been a period of warm weather, the upper portion of the river will be frozen over. Generally, there is open water under the bridge where Route 195 crosses the river and the trip can start from here. In this area one may see many birds quite close up. Look for Mallards, Black Ducks, Buffleheads, Hooded Mergansers and Coot.

As you go south along the river watch along the telephone wires for a Kingfisher. A short distance from the bridge there is a place where the land juts out into the water forming a small marsh area. A Great Blue Heron may often be seen there along with several Mute Swans and occasionally a Pied-billed Grebe along the edge of the marsh. The section of the river that borders the Peace Sanctuary is the area that holds the greatest number and variety of waterfowl in the winter months. The species regularly present are Mallards, Black Ducks, Common Goldeneyes, Buffleheads, Hooded, Common and Red-breasted Mergansers. A close look at the many birds present will often reveal other less common types such as Greater and Lesser Scaup, Canvasback, Baldpate and Gadwall.

After looking over the water, park your car at the entrance to the Peace Sanctuary which is right on River Road across from the Mystic Seaport. Walk into the area and along the self-guiding nature trail. By using

the trail guide provided at its start one can learn several things about plant and animal life. The feeding station located along the trail draws a large population of our winter land birds. Among the common birds present will be Chickadees, White-breasted Nuthatches, Downy Woodpeckers, Tufted Titmice, Juncos, White-throated and Tree Sparrows. Less common birds to look for would include Hairy Woodpeckers, Cardinals and Fox Sparrows. As you walk along the trail you may also see other birds that do not normally come to the feeders. These include the Brown Creeper and the Golden-crowned Kinglet.

This trip can be very enjoyable and at the same time allows you to learn a lot about Nature in the dead of winter.

WANTED FOR PUBLICATION:

The Editor welcomes items of interest to children and adults for publication in the Naturalist Newsletter. Such articles, stories, activities, or letters on important topics should be submitted not later than the 15th day of the month prior to possible publication in order to be considered. For additional information contact: The Thames Science Center, Inc., 622 Williams Street, New London, Conn. 06320 or phone 443-4295....

REMINDER

Audubon Wildlife Film Lecture



John D. Bulger

"Wild Rivers of North America"

Sunday

January 28,, 1968

A stirring film story of our wilderness waterways and their importance to a great variety of animals, including man. Featured are the Allagash, St. Lawrence, Hudson and Buffalo Rivers, as well as pristine streams in the Northwest Territories. Nutria, mink, fisher and pine marten; caribou, beluga, curlew and ptarmigan are but a few of the wild creatures shown. Photographer John Douglas Bulger traveled many thousands of miles to secure footage for this film, and presents it with a fascinating and colorful narrative.

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☐ Life \$200

☐ Benefactor \$500

☐ Organization \$10

☐ Library \$3

☐ Junior (under 18) \$2

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The preservation of the Peace Sanctuary in Mystic as a natural area

The maintaining of the Williams Street Museum in New London where the public may visit and realize the values of wildlife

An active field trip program for all ages

The Audubon Screen Tours

The monthly Family Film Festival

Visiting group programs through natural areas to give people a better understanding of natural history

The Junior Naturalist Newsletter published monthly

The Adult Conservationist published monthly

Center-sponsored programs for adults and children in all subjects of natural history

The high school science lectures

The summer program

Educational programs for school, youth groups and special classes